Contents

Introduction

The nation's growing demand for skilled workers has created a need to prepare high school students for the workforce or further training as early as possible in their school careers. Thus, schools have become the primary means of preparing young people for that transition. Increasing awareness of the educational preparation for the world of work has inspired an curricular focus on career awareness, exploration, and decision-making throughout the public school years. In response to this need, attention has been directed to career cluster frameworks already developed and in shaping these to fit the needs of students. Although, there is no one-size-fits-all career grouping paradigm which works for all situations, students, or schools, implementing a class registration process that incorporate a career grouping structure enables high school students to set postsecondary career goals and plan for their fulfillment.

As stated before, each paradigm seems to have been developed for a specific purpose, none of which are a good fit for all high schools. Therefore, the career pathways framework introduced here has been selected to facilitate use of the information students will receive from the Career Aptitude Survey test, which is now required statewide for students in grades eight and nine. After these students have been tested, the CAS will be available for use by all high school students.

The Career Aptitude Survey (Bridges.com) reports results in terms of aptitudes and interests which correlate directly with the aptitude and interest variables in Choices career exploration software marketed by that company. For that reason, this registration handbook guide employs the *Choices 2002* six career pathways and six interest themes in providing a basic registration guide based in part on actual test results. The resulting interest codes, as assigned by Choices and O*Net, are provided for careers in each career pathway. Additionally, the assignment of course subjects, and postsecondary programs to career pathways replicate those in the Choices career exploration software.

Also of note, Bridges.com (Choices exploration software and the CAS) occasionally assigns a single-code descriptor to a career. The originator of the R-I-A-S-E-C paradigm, Dr. John Holland recommends the use of at least a two-letter code. It should be noted that many career exploration programs now employ Holland Occupational Codes; however, the codes as assigned by the. Holland model will differ from those assigned by O*Net, Choices, and the ASVAB. Therefore, use of a two-letter code can significantly narrow the choices of careers to explore at any given time and will more significantly correlate with the individual's interest results after taking any or all of the CAS, O*Net, or ASVAB interest surveys.

.

This registration handbook manual has been developed to serve as an example for schools to use in developing their own handbook. To facilitate this, the pages are available as separate templates as well as pages of a single template, and educators can customize the information for their own schools. These can be downloaded from the Tech Prep web site and are also available on floppy disk.

Beverly D. Dafler, EdS, NCC, LPC
Tech Prep Coordinator
Western Dakota Technical Institute
BDafler@wdti.tec.sd.us
605-394-4034 ext 318

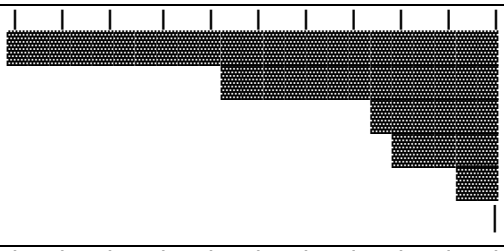
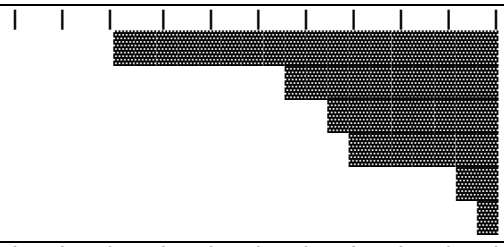
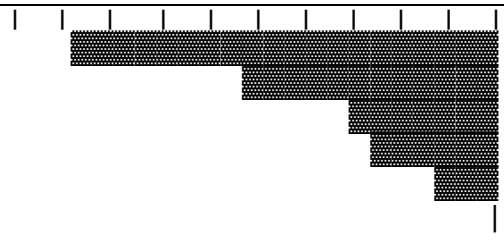
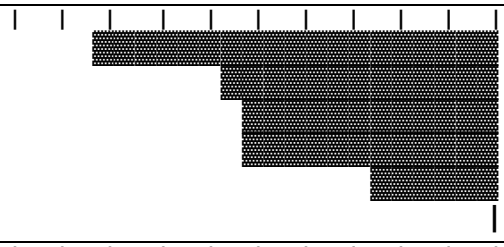
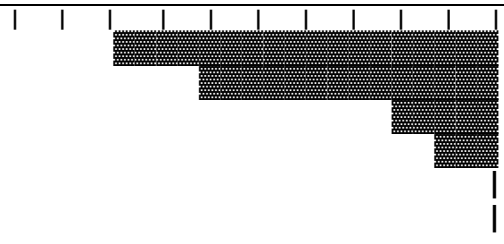
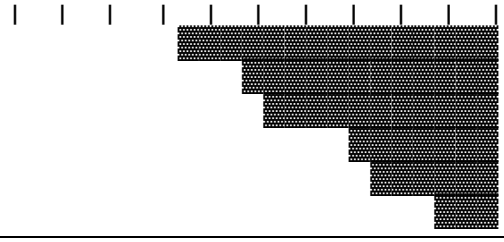
Pathways/Interests Correlations Report

On the following page, you will find graphs showing the correlations between the Choices 2002 Career Pathways and the Choices/O*Net Interest Themes as assigned by Choices. As you can see, there is no direct correlation between the six career pathways and the six personality themes. For example, a high correlation between the Enterprising Personality Theme and the Business, Information Management, and Marketing Pathway is obvious. And although there is a high correlation between the two, there is an even higher correlation between the Conventional Personality Theme and that same pathway, which is less obvious but more valid. Thus, strength of each correlation between theme and pathway, is noted as the percent in which that particular code appeared in the numbers of occupations listed for that career pathway. The basic data consisted of the 656 occupations listed in the 2001-02 version of Choices; with varying numbers of occupations assigned to each of the career pathways, as noted above.

The Choices software program identifies six career pathways to assist high school students in enrolling in high school courses pertinent to their career goals. In addition, Choices employs six categories (of work environments and interests) to report survey results for the Interest Profiler available on the Choices' 2001-02 edition and as part of the Career Aptitude Survey. The Choice's Interest Profile is identical to O*Net's Interest Profiler; both match one's current interests to existing careers in which people with similar interests are employed. Although the six categories are identified as Dr. John L. Holland's well-known R-I-A-S-E-C, the way these codes are compatible only in definition. Dr. John Holland's self-survey instrument, the Self-Directed Search, assesses activities, competencies, occupations, and self-estimates in arriving at a summary code, in contrast to the O*Net/Choices self-survey which assesses only interests.

Thus, in comparing codes assignments in *The Dictionary of Holland Occupational Codes, Third Edition* (Drs. Gottfredson and Holland, 1996) to those in the Choices software program, correlation is significant but not exact. For example, all 12,000 of the careers in *The Dictionary of Holland Occupational Codes* were assigned a three-letter code, as per Dr. Holland's theories on personality and work environments. The themes used in Choices were developed using Dr. Holland's definitions of these types but assigned to careers by occupational analysts in the Department of Labor. These analysts chose to assign one or two letter codes to careers, combined subspecialties of certain jobs with different codes into one job title with one code, thus omitting information that could be of value in matching interests and careers. (i.e., 19 different engraver specialties, each with Holland Occupational Codes incorporating R plus various combinations of E, S, I, C, and/or A, were combined in O*Net under the job title engraver with a single-letter code of R.) In using the Choices software, it is recommended that any decisions regarding career goals be made using a variety of assessments and career information sources

Choices Career Pathways and O*Net Personality Themes Correlations

Choices Career Pathway	O*Net Personality Theme	Frequency of Occurence	
Agriculture and Natural Resources *46 Occupations:* *7% of those listed in Choices 2001-02*	Realistic Investigative Conventional Enterprising Social Artistic		100% 59% 28% 24% 11% .2%
Arts and Communications *39 Occupations:* *5.9% of those listed in Choices 2001-02*	Artistic Enterprising Realistic Social Investigative Conventional		77% 46% 36% 33% 10% 8%
Business, Information Management, and Marketing *136 Occupations:* *20.7% of those listed in Choices 2001-02*	Conventional Enterprising Realistic Social Investigative Artistic		88% 54% 28% 24% 15% .7%
Health and Related Services *52 Occupations:* *7.9% of those listed in Choices 2001-02*	Realistic Artistic Investigative Social Conventional Enterprising		85% 67% 65% 65% 17% 2%
Engineering and Industrial Technologies *275 Occupations:* *41.9% of those listed in Choices 2001-02*	Realistic Conventional Investigative Enterprising Artistic Social		77% 62% 23% 13% 2% 2%
Social and Human Services *108 Occupations:* *16.4% of those listed in Choices 2001-02*	Social Enterprising Realistic Conventional Artistic Investigative		64% 55% 48% 32% 25% 19%

South Dakota Career Assessment Program

The South Dakota Career Assessment Program consists of two assessments: The Interest Profiler and The Career Aptitude Survey. The purpose of the program is to provide an inventoried measure of career interest and aptitude for South Dakota students in grades eight through twelve. A secondary purpose for the program is to allow integration of each student's career assessment results into a comprehensive computer-based career guidance system. The third purpose is to move to web-based testing from paper/pencil. The program is an integral part of South Dakota's emerging computerized guidance framework.

The Interest Profiler

- ✓ Developed by the U.S. Department of Labor as the O*Net Career Exploration Tool.
- ✓ Consists of 180 items describing work activities.
- ✓ The response pattern for each item is Like, Unsure, Dislike. Only items marked "Like" receive a score.
- ✓ The results correspond with Holland's Vocational Personality Theory.
- ✓ The Holland Occupational Codes provide a clustering arrangement for occupations appropriate for each student's consideration.
- ✓ Meaning of the R-I-A-S-E-C:
  - **Realistic**—interested in practical, "hands-on" problems and solutions.
  - **Investigative**—interested in ideas and thinking about problems, rather than physical activities.
  - **Artistic**—interested in self-expression in work, forms, design, patterns.
  - **Social**—interested in assisting others' learning and development.
  - **Enterprising**—interested in carrying out projects, especially business, as in persuading and leading.
  - **Conventional**—interested in following set procedures and routines, prefer working with data and detail, rather than ideas.

The Career Aptitude Survey (CAS)

- ✓ The test is based on a well-documented aptitude survey used in industry.
- ✓ CAS is a computerized, multi-aptitude test battery designed to assess abilities important for a wide variety of jobs.
- ✓ The survey is designed to give users information on strengths and weaknesses relative to jobs.
- ✓ The CAS is not to be used to predict success.
- ✓ CAS consists of a battery of five tests.
  - Verbal Comprehension—ability to understand written words.
  - Numerical Ability—ability to add, subtract, multiply, and divide integers, decimals, and fractions.
  - Visual Speed and Accuracy—ability to compare numbers or patterns quickly.
  - Space Visualization—ability to visualize objects in space and manipulate mentally.
  - Numerical Reasoning—ability to analyze logical numerical relationships and discover underlying principles.

Sample Course Descriptions

ENGLISH DEPARTMENT

English 10 Grade 10
One Credit
AC (WDTI) Required for Graduation

This course consists of two sections which include ½ unit of speech and ½ unit of literature writing. The speech unit exposes students to skills in communications, discussion, parliamentary procedure, informative speaking, visual aids, and persuasive speaking. The literature-writing unit follows the modern treads of writing in the following genre: short story, mystery, nonfiction and poetry. Students will gain a variety of writing experiences. Grammar is an integral part of the whole and will reflect grammatical usage as evidence in the reading selections. Vocabulary emphasize contextual understanding and is based on the literature read as part of the course.

Education Practicum I
One Credit Grades 10, 11, 12

This course is designed to help prepare students for careers in child development, social services, education, and other careers concerned with the teaching and welfare of children. The course combines class instruction with actual practical experiences in the care and training of elementary children. The district's K-12 classrooms, special education classes, and child care center provide interesting and rewarding laboratory experience for students. The course requires meeting two periods each day for one semester. Students are responsible for their own transportation.

BUSINESS DEPARTMENT

CISCO I
One-half Credit Grades 11, 12

Prerequisite: Computer Studies and Applications
The Cisco program is designed to teach students the skills needed to design, build, and maintain small to medium size networks. All class work is in a hands-on format. The first semester contains information on OSI model and industry standards, network topologies, IP addressing, networking components, and basic networking design. Interested students need instructor permission to enroll.

ACCOUNTING I
One Credit Grades 10, 11, 12
DE (BHSU)

Accounting is the language of business, which includes planning, recording, analyzing, and interpreting financial information. This is a comprehensive course, which covers accounting for the sole proprietor, partnership, and corporation. It is especially recommended for those students who plan to further their education in the business field, for those who may someday be in business for themselves, or for any student who plans to work in an office or business.

TECHNICAL EDUCATION DEPARTMENT

TECHNOLOGY EDUCATION
One-half Credit Grades 9, 10, 11, 12

Technology education is designed for students to experience many of the new technologies being developed. Areas covered will be graphic design, virtual reality, editing, criminology, laser applications, multi-media, and CNC milling.

ELECTRONICS/ELECTRICITY
One-half Credit Grades 10, 11, 12
Prerequisite: Algebra I

This is an introductory course in the study of electricity and electronics. The theory, generation of, and uses for electricity are studied. Methods used to control electricity to use at work and home are studied. Electronics theory, principles, and circuits are studied. Testing electronic circuits is done in the lab.

DRAFTING I
One-half Credit Grades 9, 10, 11, 12
AC & DE (WDTI)

This course introduces the student to fundamental drafting skills. Fundamentals learned in this course include basic drafting language and terminology, drafting computer and plotter sue, drafting industry symbol use, computer-aided drafting software sue, and a working knowledge of CAD (computer-aided drafting and design systems. Drawings are completed using CAD on the computer.

AUTO MECHANICS
Two Credits Grade 12
AC (WDTI)
Prerequisite: Auto Mechanics

This course meets for two hours each day. It is designed to teach the student the related material and develop skills with practical application in the following areas: 1) automotive safety, 2) engine fundamentals, 3) lubrication and cooling systems, 4) fuel systems, 5) electrical systems, 6) computer diagnosis, 7) tune-up procedures, 8) suspensions and chassis, 9) brakes and drive train, and 10) wheels and tires. This course accepts a limited number of qualified students. Application is required.

Career Pathway Registration Handbook Template

Career Pathways Registration Handbook Action Plan

1. Identify the staff members who will participate in developing a registration handbook.

   _____
   _____
   _____
   _____
   _____

2. Identify the tasks to be accomplished and establish a timeline.

Task	Person Responsible	Deadline
Update or develop course descriptions		
Assign courses to career pathways		
Create career pathway registration form		

3. Identify what information will be included in your school's registration handbook.

   _____
   _____
   _____
   _____
   _____

4. Identify means for validating courses within the career pathways: advisory groups, process, etc.

   _____
   _____
   _____
   _____
   _____

5. Identify your plans for using the Career Pathways Registration Handbook to enhance career awareness for students, parents, and your community.

   _____
   _____
   _____
   _____
   _____

Contact Information

WEB SITE:
http://www.state.sd.us/deca/DWCP/TechPrep/

Marsha Kucker
State Coordinator
Technical Education Resource Center
800 Governors Drive
Pierre, SD 57501
605-773-7006
email: marsha.kucker@state.sd.us

Dodie Bemis
Tech Prep Coordinator
Lake Area Technical Institute
PO Box 730
Watertown, SD 57201-0730
605-882-5284 ext 328 or 800-657-4344
email: dbemis@wtn.k12.sd.us

Scott Fossum
Tech Prep Coordinator
Mitchell Technical Institute
821 North Capital
Mitchell SD 57301
605-995-3024 ext 3072 or 800-952-0042
email: fossums@mit.tec.sd.us

Debi Nowak
Tech Prep Coordinator
Southeast Technical Institute
2320 North Career Avenue
Sioux Falls, SD 57107
605-782-3244 or 800-247-0789
email: Deborah.nowak@southeasttech.com

Beverly Dafler
Tech Prep Coordinator
Western Dakota Technical Institute
800 Mickelson Drive
Rapid City, SD 57703
605-394-4034 ext 318 or 800-544-8765
email: Bdafler@wdti.tec.sd.us